13. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes X No____

Comments: None.

14. Additional Comments or Problems/Resolutions Not Addressed Above

Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

R	-	Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
J	-	The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.
J+	-	The associated numerical value is an estimated quantity but the result may be biased high.
J-	-	The associated numerical value is an estimated quantity but the result may be biased low.
U J	-	The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.
N J	-	Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
U	-	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRQL standard required for AA
CRQL	Contract Required Quantitation Limit
CRI	CRQL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MDL	Method Detection Limit
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35G5

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769001

% Solids: 79.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.44	J	N	MS	1.3 UJ N
7440-38-2	Arsenic	58.9		E	MS	J N
7440-39-3	Barium	144.			MS	
7440-41-7	Beryllium	0.25	J	E	MS	0.63 UJ N
7440-43-9	Cadmium	0.77		E	MS	J N
7440-70-2	Calcium					
7440-47-3	Chromium	4.8		E	MS	J N
7440-48-4	Cobalt	4.0			MS	
7440-50-8	Copper	64.9		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	254.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	406.		E	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	1.9		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	1.5	J	N	MS	3.1 UJ N
7440-22-4	Silver	0.95		N	MS	J N
7440-23-5	Sodium					
7440-28-0	Thallium	0.45	J		MS	0.630 J N
7440-62-2	Vanadium	36.5			MS	
7440-66-6	Zinc	192.		NE	MS	J- N
57-12-5	Cyanide					2/18/11

Color Before: BROWN Clarity Before: _____ Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35G5

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769001

% Solids: 79.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3730			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	195.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	53500			P
7439-92-1	Lead				
7439-95-4	Magnesium	2030			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	606.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	26.2	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

6270 M

6270 M

6270 M
2/18/11

Color Before: ORANGE Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35G6

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769002

% Solids: 62.9 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.82	J	N	MS	1.6 U J M
7440-38-2	Arsenic	44.2		E	MS	J M
7440-39-3	Barium	443.			MS	
7440-41-7	Beryllium	0.38	J	E	MS	0.79 U J M
7440-43-9	Cadmium	0.73	J	E	MS	0.79 U J M
7440-70-2	Calcium					
7440-47-3	Chromium	4.6		E	MS	J M
7440-48-4	Cobalt	3.5			MS	
7440-50-8	Copper	35.8		E	MS	J M
7439-89-6	Iron					
7439-92-1	Lead	372.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	344.		E	MS	J M
7439-97-6	Mercury					
7440-02-0	Nickel	2.7		E	MS	J M
7440-09-7	Potassium					
7782-49-2	Selenium	1.8	J	N	MS	4.0 U J M
7440-22-4	Silver	2.2		N	MS	J M
7440-23-5	Sodium					
7440-28-0	Thallium	0.64	J		MS	0.79 U J M
7440-62-2	Vanadium	37.2			MS	
7440-66-6	Zinc	179.		NE	MS	J- M 2/18/11
57-12-5	Cyanide					

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35G6

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769002

% Solids: 62.9 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4750			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	854.			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	73000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	1890			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1150			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	72.1	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ TM

795 U TM
2/18/11

Color Before: ORANGE Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35G7

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769005

% Solids: 36.2 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	1.1	J	N	MS	2.80J M
7440-38-2	Arsenic	36.7		E	MS	J N
7440-39-3	Barium	30.7			MS	
7440-41-7	Beryllium	0.13	J	E	MS	1.4UJ N
7440-43-9	Cadmium	0.11	J	E	MS	1.4UJ N
7440-70-2	Calcium					
7440-47-3	Chromium	5.1		E	MS	J N
7440-48-4	Cobalt	1.4	J		MS	2.8U N
7440-50-8	Copper	113.		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	136.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	156.		E	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	0.99	J	E	MS	1.4UJ N
7440-09-7	Potassium					
7782-49-2	Selenium	0.78	J	N	MS	6.9UJ N
7440-22-4	Silver	0.38	J	N	MS	1.4UJ N
7440-23-5	Sodium					
7440-28-0	Thallium	0.12	J		MS	1.4UJ N
7440-62-2	Vanadium	27.8			MS	
7440-66-6	Zinc	44.1		NE	MS	J- N 2/18/11
57-12-5	Cyanide					

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35G7

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769005

% Solids: 36.2 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2020			P	
7440-36-0	Antimony					
7440-38-2	Arsenic					
7440-39-3	Barium					
7440-41-7	Beryllium					
7440-43-9	Cadmium					
7440-70-2	Calcium	1110			P	1380 U M
7440-47-3	Chromium					
7440-48-4	Cobalt					
7440-50-8	Copper					
7439-89-6	Iron	397000		D	P	
7439-92-1	Lead					
7439-95-4	Magnesium	753.	J		P	1380 U M
7439-96-5	Manganese					
7439-97-6	Mercury					
7440-02-0	Nickel					
7440-09-7	Potassium	498.	J		P	1380 U M
7782-49-2	Selenium					
7440-22-4	Silver					
7440-23-5	Sodium	53.5	J	E	P	1380 U M
7440-28-0	Thallium					2/18/11
7440-62-2	Vanadium					
7440-66-6	Zinc					
57-12-5	Cyanide					

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35G8

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769006

% Solids: 78.1 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.14	J	N	MS	1.3UJ N
7440-38-2	Arsenic	11.6		E	MS	J N
7440-39-3	Barium	78.8			MS	N
7440-41-7	Beryllium	0.66		E	MS	J+
7440-43-9	Cadmium	0.42	J	E	MS	0.64UJ N
7440-70-2	Calcium					
7440-47-3	Chromium	6.2		E	MS	J N
7440-48-4	Cobalt	6.5			MS	
7440-50-8	Copper	65.0		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	145.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	839.		DE	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	4.2		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	1.0	J	N	MS	3.2UJ N
7440-22-4	Silver	0.48	J	N	MS	0.64UJ N
7440-23-5	Sodium					
7440-28-0	Thallium	0.31	J		MS	0.64UJ N
7440-62-2	Vanadium	52.2			MS	
7440-66-6	Zinc	145.		NE	MS	J- N
57-12-5	Cyanide					2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35G8

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35G5
Matrix: Soil Lab Sample ID: 1030769006
% Solids: 78.1 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8370			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1230			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	34800			P
7439-92-1	Lead				
7439-95-4	Magnesium	1460			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	902.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	72.2	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ TR

640 U TR
2/18/11

Color Before: ORANGE Clarity Before: Texture: COARSE
Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35G9

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769007

% Solids: 33.3 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	1.8	J	N	MS	3.0 U J
7440-38-2	Arsenic	24.5		E	MS	J
7440-39-3	Barium	36.1			MS	
7440-41-7	Beryllium	0.74	J	E	MS	1.5 U J
7440-43-9	Cadmium	1.2	J	E	MS	1.5 U J
7440-70-2	Calcium					
7440-47-3	Chromium	6.1		E	MS	J
7440-48-4	Cobalt	2.3			MS	3.0 U
7440-50-8	Copper	147.		E	MS	J
7439-89-6	Iron					
7439-92-1	Lead	773.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	489.		E	MS	J
7439-97-6	Mercury					
7440-02-0	Nickel	2.0		E	MS	J
7440-09-7	Potassium					
7782-49-2	Selenium	1.0	J	N	MS	7.5 U J
7440-22-4	Silver	8.5		N	MS	J
7440-23-5	Sodium					
7440-28-0	Thallium	0.19	J		MS	1.5 U J
7440-62-2	Vanadium	34.0			MS	
7440-66-6	Zinc	465.		NE	MS	J-
57-12-5	Cyanide					

2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

000213

EPA SAMPLE NO.
MH35G9

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769007

% Solids: 33.3 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3850			P	
7440-36-0	Antimony					
7440-38-2	Arsenic					
7440-39-3	Barium					
7440-41-7	Beryllium					
7440-43-9	Cadmium					
7440-70-2	Calcium	1390			P	1500 U M
7440-47-3	Chromium					
7440-48-4	Cobalt					
7440-50-8	Copper					
7439-89-6	Iron	218000		D	P	
7439-92-1	Lead					
7439-95-4	Magnesium	646.	J		P	1500 U M
7439-96-5	Manganese					
7439-97-6	Mercury					
7440-02-0	Nickel					
7440-09-7	Potassium	514.	J		P	1500 U M
7782-49-2	Selenium					
7440-22-4	Silver					
7440-23-5	Sodium	38.4	J	E	P	1500 U M
7440-28-0	Thallium					2/18/11
7440-62-2	Vanadium					
7440-66-6	Zinc					
57-12-5	Cyanide					

Color Before: RED Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H0

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769008

% Solids: 44.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	2.3		N	MS
7440-38-2	Arsenic	23.2		E	MS
7440-39-3	Barium	46.5			MS
7440-41-7	Beryllium	0.37	J	E	MS
7440-43-9	Cadmium	2.4		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	4.0		E	MS
7440-48-4	Cobalt	1.1	J		MS
7440-50-8	Copper	112.		E	MS
7439-89-6	Iron				
7439-92-1	Lead	457.			MS
7439-95-4	Magnesium				
7439-96-5	Manganese	239.		E	MS
7439-97-6	Mercury				
7440-02-0	Nickel	1.1		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.83	J	N	MS
7440-22-4	Silver	3.9		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.11	J		MS
7440-62-2	Vanadium	31.7			MS
7440-66-6	Zinc	1040		DNE	MS
57-12-5	Cyanide				

J N
J N
MS
1.1 UJ N
J N
J N
2.2 U N
J N
MS
J N
MS
1.1 UJ N
5.6 UJ N
J N
MS
1.1 UJ N
MS
J- N
2/18/11

Color Before: RED Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H0

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769008

% Solids: 44.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4670			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1130			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	442000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	791.			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	504.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	33.9	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

1120.0 M

1120.0 M

1120.0 M
2/18/11

Color Before: RED Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H1

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769009

% Solids: 31.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.46	J	N	MS	3.2UJ N
7440-38-2	Arsenic	57.5		E	MS	J N
7440-39-3	Barium	200.			MS	
7440-41-7	Beryllium	1.1	J	E	MS	1.6UJ N
7440-43-9	Cadmium	1.1	J	E	MS	1.6UJ N
7440-70-2	Calcium					
7440-47-3	Chromium	11.9		E	MS	J N
7440-48-4	Cobalt	23.7			MS	
7440-50-8	Copper	250.		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	1460		D	MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	2360		DE	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	12.3		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	1.3	J	N	MS	7.9UJ N
7440-22-4	Silver	1.4	J	N	MS	1.6UJ N
7440-23-5	Sodium					
7440-28-0	Thallium	0.77	J		MS	1.6UJ N
7440-62-2	Vanadium	62.0			MS	
7440-66-6	Zinc	378.		NE	MS	J- N 2/18/11
57-12-5	Cyanide					

Color Before: BLACK Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H1

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5
Matrix: Soil Lab Sample ID: 1030769009
% Solids: 31.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8140			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1940			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	65400			P
7439-92-1	Lead				
7439-95-4	Magnesium	2260			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	817.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	44.5	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

1580 U m

1580 U m
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H2

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769010

% Solids: 36.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.65	J	N	MS	2.7 U J
7440-38-2	Arsenic	15.2		E	MS	J
7440-39-3	Barium	71.6			MS	
7440-41-7	Beryllium	0.33	J	E	MS	1.4 U J
7440-43-9	Cadmium	0.58	J	E	MS	1.4 U J
7440-70-2	Calcium					
7440-47-3	Chromium	6.4		E	MS	J
7440-48-4	Cobalt	6.8			MS	
7440-50-8	Copper	124.		E	MS	J
7439-89-6	Iron					
7439-92-1	Lead	341.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	2010		DE	MS	J
7439-97-6	Mercury					
7440-02-0	Nickel	2.2		E	MS	J
7440-09-7	Potassium					
7782-49-2	Selenium	0.83	J	N	MS	6.9 U J
7440-22-4	Silver	4.0		N	MS	J
7440-23-5	Sodium					
7440-28-0	Thallium	0.33	J		MS	1.4 U J
7440-62-2	Vanadium	27.3			MS	
7440-66-6	Zinc	242.		NE	MS	J-
57-12-5	Cyanide					

2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H2

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769010

% Solids: 36.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4940			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1330			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	159000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	1150			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	729.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	53.0	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

1370 U M
1370 U M
1370 U M
1370 U M
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769011

% Solids: 78.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.20	J	N	MS	1.3 U J N
7440-38-2	Arsenic	26.2		E	MS	J N
7440-39-3	Barium	51.8			MS	
7440-41-7	Beryllium	0.23	J	E	MS	0.64 U J N
7440-43-9	Cadmium	0.51	J	E	MS	0.64 U J N
7440-70-2	Calcium					
7440-47-3	Chromium	9.1		E	MS	J N
7440-48-4	Cobalt	4.3			MS	
7440-50-8	Copper	42.8		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	294.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	624.		DE	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	4.1		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	0.92	J	N	MS	3.2 U J N
7440-22-4	Silver	0.88		N	MS	J N
7440-23-5	Sodium					
7440-28-0	Thallium	0.23	J		MS	0.64 U J N
7440-62-2	Vanadium	29.1			MS	
7440-66-6	Zinc	145.		NE	MS	J- N 2/18/11
57-12-5	Cyanide					

Color Before: YELLOW Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769011

% Solids: 78.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9330			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1710			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	18200			P
7439-92-1	Lead				
7439-95-4	Magnesium	8680			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	297.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	20.8	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

638 U TM

638 U TM
2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H4

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769012

% Solids: 35.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.74	J	N	MS	2.80 J N
7440-38-2	Arsenic	20.5		E	MS	J N
7440-39-3	Barium	61.9			MS	
7440-41-7	Beryllium	0.41	J	E	MS	1.4 U J N
7440-43-9	Cadmium	0.50	J	E	MS	1.4 U J N
7440-70-2	Calcium					
7440-47-3	Chromium	4.3		E	MS	J N
7440-48-4	Cobalt	6.0			MS	
7440-50-8	Copper	84.0		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	362.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	1910		DE	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	1.6		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	0.69	J	N	MS	7.1 U J N
7440-22-4	Silver	2.3		N	MS	J N
7440-23-5	Sodium					
7440-28-0	Thallium	0.33	J		MS	1.4 U J N
7440-62-2	Vanadium	29.7			MS	
7440-66-6	Zinc	240.		NE	MS	J- N 2/18/11
57-12-5	Cyanide					

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

000223

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H4

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769012

% Solids: 35.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4520			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1110			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	203000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	941.	J		P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	730.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	73.1	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

1410 U N

1410 U N

1410 U N

1410 U N
2/18/11

Color Before: RED Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H5

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769013

% Solids: 45.3 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.47	J	N	MS	2.2 UJ N
7440-38-2	Arsenic	20.3		E	MS	J N
7440-39-3	Barium	142.			MS	
7440-41-7	Beryllium	0.44	J	E	MS	1.1 UJ N
7440-43-9	Cadmium	0.70	J	E	MS	1.1 UJ N
7440-70-2	Calcium					
7440-47-3	Chromium	6.4		E	MS	J N
7440-48-4	Cobalt	3.2			MS	
7440-50-8	Copper	80.7		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	875.		D	MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	659.		E	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	2.9		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	1.6	J	N	MS	5.5 UJ N
7440-22-4	Silver	2.3		N	MS	J N
7440-23-5	Sodium					
7440-28-0	Thallium	0.61	J		MS	1.1 UJ N
7440-62-2	Vanadium	62.0			MS	
7440-66-6	Zinc	206.		NE	MS	J- N
57-12-5	Cyanide					2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H5

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769013

% Solids: 45.3 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6730			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	859.			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	144000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	2820			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1250			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	102.	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

1100 U M

J+ M

1100 U M
2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H6

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769014

% Solids: 36.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	1.6	J	N	MS	2.7 U J n
7440-38-2	Arsenic	35.6		E	MS	J n
7440-39-3	Barium	85.9			MS	
7440-41-7	Beryllium	0.52	J	E	MS	1.4 U J n
7440-43-9	Cadmium	2.7		E	MS	J n
7440-70-2	Calcium					
7440-47-3	Chromium	8.0		E	MS	J n
7440-48-4	Cobalt	4.7			MS	
7440-50-8	Copper	212.		E	MS	J n
7439-89-6	Iron					
7439-92-1	Lead	2050		D	MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	1300		DE	MS	J n
7439-97-6	Mercury					
7440-02-0	Nickel	2.5		E	MS	J n
7440-09-7	Potassium					
7782-49-2	Selenium	1.1	J	N	MS	6.9 U J n
7440-22-4	Silver	5.0		N	MS	J n
7440-23-5	Sodium					
7440-28-0	Thallium	0.41	J		MS	1.4 U J n
7440-62-2	Vanadium	37.2			MS	
7440-66-6	Zinc	628.		NE	MS	J n
57-12-5	Cyanide					2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H6

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769014

% Solids: 36.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	5750			P	
7440-36-0	Antimony					
7440-38-2	Arsenic					
7440-39-3	Barium					
7440-41-7	Beryllium					
7440-43-9	Cadmium					
7440-70-2	Calcium	1270			P	1370 U N
7440-47-3	Chromium					
7440-48-4	Cobalt					
7440-50-8	Copper					
7439-89-6	Iron	266000		D	P	
7439-92-1	Lead					
7439-95-4	Magnesium	2370			P	
7439-96-5	Manganese					
7439-97-6	Mercury					
7440-02-0	Nickel					
7440-09-7	Potassium	956.	J		P	1370 U N
7782-49-2	Selenium					
7440-22-4	Silver					
7440-23-5	Sodium	78.6	J	E	P	1370 U N 2/18/11
7440-28-0	Thallium					
7440-62-2	Vanadium					
7440-66-6	Zinc					
57-12-5	Cyanide					

Color Before: ORANGE Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H8

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769015

% Solids: 29.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	5.6		N	MS	J
7440-38-2	Arsenic	126.		E	MS	J
7440-39-3	Barium	21.4			MS	
7440-41-7	Beryllium	0.26	J	E	MS	1.7 U J
7440-43-9	Cadmium	0.12	J	E	MS	1.7 U J
7440-70-2	Calcium					
7440-47-3	Chromium	7.4		E	MS	J
7440-48-4	Cobalt	1.1	J		MS	3.4 U
7440-50-8	Copper	369.		E	MS	J
7439-89-6	Iron					
7439-92-1	Lead	59.4			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	130.		E	MS	J
7439-97-6	Mercury					
7440-02-0	Nickel	1.1	J	E	MS	1.7 U J
7440-09-7	Potassium					
7782-49-2	Selenium	2.4	J	N	MS	8.4 U J
7440-22-4	Silver	0.29	J	N	MS	1.7 U J
7440-23-5	Sodium					
7440-28-0	Thallium	0.070	J		MS	1.7 U J
7440-62-2	Vanadium	88.0			MS	
7440-66-6	Zinc	63.3		NE	MS	J-
57-12-5	Cyanide					

2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H8

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5
Matrix: Soil Lab Sample ID: 1030769015
% Solids: 29.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4960			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1820			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	519000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	1460			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	583.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	141.	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

1680 U TM

1680 U TM

1680 U TM
2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: COARSE
Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H9

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769016

% Solids: 34.2 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	1.2	J	N	MS	2.9 UJ K
7440-38-2	Arsenic	43.9		E	MS	J K
7440-39-3	Barium	3.5	J		MS	
7440-41-7	Beryllium	1.2	J	E	MS	1.5 UJ K
7440-43-9	Cadmium	0.74	J	E	MS	1.5 UJ K
7440-70-2	Calcium					
7440-47-3	Chromium	0.62	J	E	MS	2.9 UJ K
7440-48-4	Cobalt	0.62	J		MS	2.9 U K
7440-50-8	Copper	11.0		E	MS	J K
7439-89-6	Iron					
7439-92-1	Lead	1740		D	MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	107.		E	MS	J K
7439-97-6	Mercury					
7440-02-0	Nickel	0.59	J	E	MS	1.5 UJ K
7440-09-7	Potassium					
7782-49-2	Selenium	0.34	J	N	MS	7.3 UJ K
7440-22-4	Silver	0.88	J	N	MS	1.5 UJ K
7440-23-5	Sodium					
7440-28-0	Thallium	0.017	J		MS	1.5 UJ K
7440-62-2	Vanadium	12.4			MS	
7440-66-6	Zinc	361.		NE	MS	J- K
57-12-5	Cyanide					2/18/11

Color Before: RED Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H9

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5
Matrix: Soil Lab Sample ID: 1030769016
% Solids: 34.2 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3170			P	
7440-36-0	Antimony					
7440-38-2	Arsenic					
7440-39-3	Barium					
7440-41-7	Beryllium					
7440-43-9	Cadmium					
7440-70-2	Calcium	1490			P	
7440-47-3	Chromium					
7440-48-4	Cobalt					
7440-50-8	Copper					
7439-89-6	Iron	445000		D	P	
7439-92-1	Lead					
7439-95-4	Magnesium	327.	J		P	1460 U TM
7439-96-5	Manganese					
7439-97-6	Mercury					
7440-02-0	Nickel					
7440-09-7	Potassium	268.	J		P	1460 U TM
7782-49-2	Selenium					
7440-22-4	Silver					
7440-23-5	Sodium	28.6	J	E	P	1460 U TM 2/18/11
7440-28-0	Thallium					
7440-62-2	Vanadium					
7440-66-6	Zinc					
57-12-5	Cyanide					

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J0

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5
Matrix: Soil Lab Sample ID: 1030769017
% Solids: 60.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.29	J	N	MS	1.7 U J N
7440-38-2	Arsenic	33.3		E	MS	J N
7440-39-3	Barium	92.7			MS	
7440-41-7	Beryllium	1.1		E	MS	J+ N
7440-43-9	Cadmium	1.3		E	MS	J N
7440-70-2	Calcium					
7440-47-3	Chromium	7.6		E	MS	J N
7440-48-4	Cobalt	16.5			MS	
7440-50-8	Copper	209.		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	711.		D	MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	4130		DE	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	8.0		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	0.32	J	N	MS	4.1 U J N
7440-22-4	Silver	2.1		N	MS	J N
7440-23-5	Sodium					
7440-28-0	Thallium	0.39	J		MS	0.83 U J N
7440-62-2	Vanadium	64.1			MS	
7440-66-6	Zinc	289.		NE	MS	J- N
57-12-5	Cyanide					2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM
Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J0

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769017

% Solids: 60.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13700			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1660			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	37300			P
7439-92-1	Lead				
7439-95-4	Magnesium	8730			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	703.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	25.2	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

825 U N

825 U N
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J1

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769018

% Solids: 33.1 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	1.0	J	N	MS	3.0 UJ N
7440-38-2	Arsenic	49.8		E	MS	J N
7440-39-3	Barium	75.6			MS	
7440-41-7	Beryllium	0.26	J	E	MS	1.5 UJ N
7440-43-9	Cadmium	0.28	J	E	MS	1.5 UJ N
7440-70-2	Calcium					
7440-47-3	Chromium	7.1		E	MS	J N
7440-48-4	Cobalt	3.9			MS	
7440-50-8	Copper	96.7		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	421.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	618.		E	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	3.6		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	1.5	J	N	MS	7.6 UJ N
7440-22-4	Silver	2.4		N	MS	J N
7440-23-5	Sodium					
7440-28-0	Thallium	0.31	J		MS	1.5 UJ N
7440-62-2	Vanadium	43.1			MS	
7440-66-6	Zinc	98.1		NE	MS	J- N
57-12-5	Cyanide					2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J1

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769018

% Solids: 33.1 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3240			P	
7440-36-0	Antimony					
7440-38-2	Arsenic					
7440-39-3	Barium					
7440-41-7	Beryllium					
7440-43-9	Cadmium					
7440-70-2	Calcium	1070	J		P	1510 U
7440-47-3	Chromium					
7440-48-4	Cobalt					
7440-50-8	Copper					
7439-89-6	Iron	300000		D	P	
7439-92-1	Lead					
7439-95-4	Magnesium	1210	J		P	1510 U
7439-96-5	Manganese					
7439-97-6	Mercury					
7440-02-0	Nickel					
7440-09-7	Potassium	1020	J		P	1510 U
7782-49-2	Selenium					
7440-22-4	Silver					
7440-23-5	Sodium	90.9	J	E	P	1510 U
7440-28-0	Thallium					
7440-62-2	Vanadium					
7440-66-6	Zinc					
57-12-5	Cyanide					

2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J2

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5
Matrix: Soil Lab Sample ID: 1030769019
% Solids: 32.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	1.7	J	N	MS	3.1 U J N
7440-38-2	Arsenic	49.1		E	MS	J N
7440-39-3	Barium	41.3			MS	
7440-41-7	Beryllium	0.13	J	E	MS	1.5 U J N
7440-43-9	Cadmium	1.0	J	E	MS	1.5 U J N
7440-70-2	Calcium					
7440-47-3	Chromium	2.2	J	E	MS	J N
7440-48-4	Cobalt	16.6			MS	
7440-50-8	Copper	32.8		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	419.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	2110		DE	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	1.7		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	0.23	J	N	MS	7.6 U J N
7440-22-4	Silver	0.84	J	N	MS	1.5 U J N
7440-23-5	Sodium					
7440-28-0	Thallium	0.25	J		MS	1.5 U J N
7440-62-2	Vanadium	12.0			MS	
7440-66-6	Zinc	232.		NE	MS	J- N
57-12-5	Cyanide					2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM
Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J2

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769019

% Solids: 32.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2320			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	729.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	462000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	1040	J		P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	373.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	30.5	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

1530 U K

1530 U K

1530 U K

1530 U K
2/18/11

Color Before: ORANGE Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769020

% Solids: 28.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.51	J	N	MS	3.5 U J N
7440-38-2	Arsenic	26.7		E	MS	J N
7440-39-3	Barium	159.			MS	
7440-41-7	Beryllium	1.6	J	E	MS	1.7 U J N
7440-43-9	Cadmium	1.0	J	E	MS	1.7 U J N
7440-70-2	Calcium					
7440-47-3	Chromium	5.1		E	MS	J N
7440-48-4	Cobalt	18.6			MS	
7440-50-8	Copper	216.		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	210.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	897.		E	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	6.0		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	1.2	J	N	MS	8.7 U J N
7440-22-4	Silver	0.56	J	N	MS	1.7 U J N
7440-23-5	Sodium					
7440-28-0	Thallium	0.50	J		MS	1.7 U J N
7440-62-2	Vanadium	31.3			MS	
7440-66-6	Zinc	339.		NE	MS	J- N 2/18/11
57-12-5	Cyanide					

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769020

% Solids: 28.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	28200			P	
7440-36-0	Antimony					
7440-38-2	Arsenic					
7440-39-3	Barium					
7440-41-7	Beryllium					
7440-43-9	Cadmium					
7440-70-2	Calcium	1950			P	
7440-47-3	Chromium					
7440-48-4	Cobalt					
7440-50-8	Copper					
7439-89-6	Iron	62200			P	
7439-92-1	Lead					
7439-95-4	Magnesium	2280			P	
7439-96-5	Manganese					
7439-97-6	Mercury					
7440-02-0	Nickel					
7440-09-7	Potassium	974.	J		P	1740 U JK
7782-49-2	Selenium					
7440-22-4	Silver					
7440-23-5	Sodium	88.4	J	E	P	1740 U JK 2/18/11
7440-28-0	Thallium					
7440-62-2	Vanadium					
7440-66-6	Zinc					
57-12-5	Cyanide					

Color Before: BROWN Clarity Before: _____ Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J4

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769021

% Solids: 78.1 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.94	J	N	MS	1.3 U J N
7440-38-2	Arsenic	23.7		E	MS	J N
7440-39-3	Barium	117.			MS	
7440-41-7	Beryllium	0.48	J	E	MS	0.64 U J N
7440-43-9	Cadmium	9.6		E	MS	J N
7440-70-2	Calcium					
7440-47-3	Chromium	8.4		E	MS	J N
7440-48-4	Cobalt	8.0			MS	
7440-50-8	Copper	244.		E	MS	J N
7439-89-6	Iron					
7439-92-1	Lead	1820		D	MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	1180		DE	MS	J N
7439-97-6	Mercury					
7440-02-0	Nickel	5.8		E	MS	J N
7440-09-7	Potassium					
7782-49-2	Selenium	0.85	J	N	MS	3.2 U J N
7440-22-4	Silver	5.4		N	MS	J N
7440-23-5	Sodium					
7440-28-0	Thallium	0.31	J		MS	0.64 U J N
7440-62-2	Vanadium	53.6			MS	
7440-66-6	Zinc	2610		DNE	MS	J- N
57-12-5	Cyanide					2/16/11

Color Before: YELLOW Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J4

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769021

% Solids: 78.1 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13900			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	5910			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	47800			P
7439-92-1	Lead				
7439-95-4	Magnesium	11200			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1070			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	77.9	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ TL

640 U TL 2/18/11

Color Before: BROWN Clarity Before: _____ Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J5

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769022

% Solids: 82.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.14	J	N	MS	1.2 U J n
7440-38-2	Arsenic	13.5		E	MS	J n
7440-39-3	Barium	113.			MS	
7440-41-7	Beryllium	0.44	J	E	MS	0.60 U J n
7440-43-9	Cadmium	0.11	J	E	MS	0.60 U J n
7440-70-2	Calcium					
7440-47-3	Chromium	10.		E	MS	J n
7440-48-4	Cobalt	6.8			MS	
7440-50-8	Copper	40.6		E	MS	J n
7439-89-6	Iron					
7439-92-1	Lead	241.			MS	
7439-95-4	Magnesium					
7439-96-5	Manganese	796.		DE	MS	J n
7439-97-6	Mercury					
7440-02-0	Nickel	6.6		E	MS	J n
7440-09-7	Potassium					
7782-49-2	Selenium	0.62	J	N	MS	3.0 U J n
7440-22-4	Silver	1.3		N	MS	J n
7440-23-5	Sodium					
7440-28-0	Thallium	0.33	J		MS	0.60 U J n
7440-62-2	Vanadium	65.3			MS	
7440-66-6	Zinc	102.		NE	MS	J- n 2/18/11
57-12-5	Cyanide					

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: WHITE Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J5

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35G5

Matrix: Soil Lab Sample ID: 1030769022

% Solids: 82.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12900			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	2080			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	36900			P
7439-92-1	Lead				
7439-95-4	Magnesium	10700			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1030			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	81.2	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ H

605 U H
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

REGION VIII
DATA VALIDATION REPORT
INORGANIC

Case/TDD No.	Site Name		Operable Unit
40755 / 1008-16	Upper Animas Mining District		
RPM/OSC Name			
Sabrina Forrest			
Contractor Laboratory	Contract No.	SDG No.	Laboratory DPO/Region
ALS Laboratory Group	EPW05026	MH35H7	

Review Assigned Date: December 15, 2010 Data Validator: Fred Luck
Review Completion Date: February 18, 2011 Report Reviewer: Lesley Boyd

Sample ID	Matrix	Analysis
MH35H7	Sediment	CLP –Metals
MH35J6	Soil - Surface	
MH35J7		
MH35J8		
MH35J9		
MH35K0		
MH35K1		
MH35K2		
MH35K3		
MH35K4		
MH35K5		
MH35K6		
MH35K7		

Sample ID	Matrix	Analysis
MH35K8	Sediment	CLP –Metals
MH35K9		
MH35L0		
MH35L1		
MH35L2		
MH35L3		

DATA QUALITY STATEMENT

( ) Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
( ) Data are UNACCEPTABLE according to EPA Functional Guidelines.
(X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No ___X___

CLP Project Officer Attention Required? Yes _____ No ___X___ If yes, list the items that require attention:

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review," January 2010.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 40755, SDG No. MH35H7, consisted of nineteen sediment / soil – Surface samples for metals by ICP-AES and ICP-MS (ISM01.2). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH35H7, MH35J7, MH35K1, MH35K2, MH35K4, MH35K5, MH35K7, MH35K8, MH35K9, MH35L1, MH35L2	Antimony	U	Blank Contamination	3
MH35H7, MH35J6, MH35J7, MH35J8, MH35J9, MH35K0 MH35K1, MH35K2, MH35K3, MH35K4, MH35K5, MH35K6, MH35K9, MH35L3	Beryllium			
MH35H7, MH35J7, MH35K2, MH35K5, MH35K9, MH35L3	Cadmium			
MH35J7, MH35J8, MH35J9, MH35K0, MH35K3, MH35K5, MH35K6, MH35K9, MH35L0, MH35L3	Calcium			
MH35K0, MH35K3, MH35K5	Chromium			
MH35J8, MH35J9, MH35K0, MH35K3, MH35K5, MH35L3	Cobalt			
MH35J7, MH35J8, MH35J9, MH35K0, MH35K3, MH35K5, MH35K9, MH35L3	Magnesium			
MH35J8, MH35J9, MH35K0, MH35K3, MH35K5, MH35L3	Nickel			
MH35J7, MH35J8, MH35K8, MH35K9, MH35L0, MH35L3	Potassium			
MH35H7, MH35J6, MH35J7, MH35J8, MH35J9, MH35K0, MH35K1, MH35K2, MH35K4, MH35K5, MH35K6, MH35K7, MH35K8, MH35K9,MH35L0, MH35L1, MH35L2, MH35L3	Selenium			
MH35H7	Silver			

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH35H7, MH35J6, MH35J7, MH35J8, MH35J9, MH35K0, MH35K1, MH35K2, MH35K3, MH35K4, MH35K5, MH35K6, MH35K7, MH35K8, MH35K9, MH35L0, MH35L1, MH35L2, MH35L3	Sodium	U	Blank Contamination	3
MH35K7, MH35K8, MH35L0, MH35L1, MH35L2	Beryllium	J+	Potentially false positive detection in ICS check sample	4
MH35H7, MH35J6, MH35J9, MH35K0, MH35K1, MH35K2, MH35K3, MH35K4, MH35K5, MH35K6, MH35K7, MH35L1, MH35L2	Potassium			
MH35J7, MH35J8, MH35K2, MH35K4, MH35K5, MH35K6, MH35K8, MH35K9, MH35L2, MH35L3	Thallium	J-	Potentially false negative detection in ICS check sample	
All Samples	Copper, Lead	J/UJ	Original & Duplicate both ≥5x the CRQL and RPD > 20%	6
	Antimony, Silver	J/UJ	MS <30%R, Post Digestion Spike %R ≥ 75%	7
	Barium, Copper	J+	MS >125%R, Post Digestion Spike not performed	
	Arsenic		MS > 125%R, Post Digestion Spike %R > 125%	
	Arsenic, Beryllium, Cadmium, Copper, Nickel, Sodium, Zinc	J/UJ	Serial Dilution %D > 10%	8

1. PRESERVATION AND HOLDING TIMES

All technical holding times and preservation criteria were met.

Yes___ No_X_

Comments: The samples were analyzed within 180 days for the ICP metals. According to the Sample Log-In Sheet and case narrative, the two sample coolers were each received at a temperature of 7°C, which is outside the recommended temperature range of 4 ± 2°C. The Sample Log-In Sheet further indicates that neither cooler contained a Cooler Temperature Indicator Bottle, as indicated on the form to be required. There is also no indication that SMO was contacted regarding this issue, neither is any documentation of the resolution or indication of how the cooler temperature was derived provided. The TR/COC also did not designate a sample for laboratory QC, but the documentation of the resolution of this issue is provided in the SDG.

When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters.

No other shipping or receiving problems were noted. Chain-of-custody, summary forms, and raw data were evaluated.

2. INSTRUMENT CALIBRATIONS: INITIAL AND CONTINUING CALIBRATION VERIFICATION (ICV AND CCV)

The initial and continuing calibration verification standards (ICV and CCV, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 85-115% for cyanide, and 80-120% for mercury.

Yes_X_ No____

Comments: None.

The continuing calibration standards were run at 10% frequency or every two hours.

Yes_X_ No____

Comments: None.

3. **BLANKS**

The initial and continuing calibration blanks (ICB and CCB, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes_X_ No____

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes_X_ No____

Comments: None.

All analyzed blanks were free of contamination.

Yes____ No_X_

Comments: The following table lists the blanks with contamination that resulted in sample qualification, elements present, affected samples, and data qualifiers:

Blank Contaminants

Blank ID	Contaminant	CRQL (mg/Kg)	MDL (mg/Kg)	Concentration Found in Blank (mg/Kg)	Associated Samples	Concentration Found in Sample (mg/Kg)	Qualifier/ Adjustment
PB	Antimony	1	0.0097	0.026	MH35H7	0.19	1.5 U
					MH35J7	1.2	1.3 U
					MH35K1	0.26	1.1 U
					MH35K2	0.25	1.1 U
					MH35K4	0.54	1.1 U
					MH35K5	0.99	1.1 U
					MH35K7	0.41	1.2 U
					MH35K8	0.59	1.3 U
					MH35K9	5.2	6.8 U
					MH35L1	0.71	1.7 U
					MH35L2	0.34	1.2 U
PB	Beryllium	0.5	0.0032	0.013	MH35H7	0.68	0.76 U
					MH35J6	0.19	0.60 U
					MH35J7	0.22	0.65 U
					MH35J8	0.16	0.78 U
					MH35J9	0.21	0.56 U
					MH35K0	0.32	0.55 U
					MH35K1	0.30	0.57 U
					MH35K2	0.20	0.55 U
					MH35K3	0.11	0.54 U
					MH35K4	0.35	0.54 U
					MH35K5	0.13	0.55 U
					MH35K6	0.19	0.55 U
					MH35K9	0.84	3.4 U
					MH35L3	0.11	3.0 U
PB	Cadmium	0.5	0.0027	0.005	MH35H7	0.25	0.76 U
					MH35J7	0.58	0.65 U
					MH35K2	0.55	0.55 U
					MH35K5	0.53	0.55 U
					MH35K9	1.7	3.4 U
					MH35L3	2.8	3.0 U
PB	Calcium	500	1.7	9.992	MH35J7	369	648 U
					MH35J8	405	775 U
					MH35J9	57.7	563 U
					MH35K0	259	551 U
					MH35K3	34.8	535 U
					MH35K5	48.6	554 U
					MH35K6	246	547 U
					MH35K9	2040	3380 U
					MH35L0	223	718 U
					MH35L3	279	2980 U
PB	Chromium	1	0.026	1.000	MH35K0	0.97	1.1 U
					MH35K3	0.86	1.1 U
					MH35K5	0.46	1.1 U
PB	Cobalt	1	0.0053	0.006	MH35J8	0.41	0.78 U
					MH35J9	0.19	0.56 U
					MH35K0	0.23	0.55 U
					MH35K3	0.35	0.54 U
					MH35K5	0.12	0.55 U
					MH35L3	1.4	3.0 U

Blank ID	Contaminant	CROL (mg/Kg)	MDL (mg/Kg)	Concentration Found in Blank (mg/Kg)	Associated Samples	Concentration Found in Sample (mg/Kg)	Qualifier/ Adjustment
PB	Magnesium	500	1.2	2.971	MH35J7	477	648 U
					MH35J8	375	775 U
					MH35J9	45.9	563 U
					MH35K0	72.4	551 U
					MH35K3	38.2	535 U
					MH35K5	118	554 U
					MH35K9	2120	3380 U
					MH35L3	486	2980 U
PB	Nickel	0.5	0.013	0.500	MH35J8	0.36	0.78 U
					MH35J9	0.19	0.56 U
					MH35K0	0.17	0.55 U
					MH35K3	0.27	0.54 U
					MH35K5	0.14	0.55 U
					MH35L3	1.6	3.0 U
PB	Potassium	500	5.8	21.198	MH35J7	319	648 U
					MH35J8	418	775 U
					MH35K8	645	664 U
					MH35K9	1130	3380 U
					MH35L0	307	718 U
					MH35L3	773	2980 U
PB	Selenium	2.5	0.036	2.500	MH35H7	1.1	3.8 U
					MH35J6	2.7	3.0 U
					MH35J7	1.2	3.2 U
					MH35J8	1.4	3.9 U
					MH35J9	1.7	2.8 U
					MH35K0	1.8	2.8 U
					MH35K1	1.3	2.8 U
					MH35K2	0.60	2.8 U
					MH35K4	0.83	2.7 U
					MH35K5	0.90	2.8 U
					MH35K6	1.3	2.7 U
					MH35K7	0.52	3.0 U
					MH35K8	0.35	3.3 U
					MH35K9	2.0	17 U
					MH35L0	0.66	3.6 U
					MH35L1	0.59	4.3 U
					MH35L2	0.59	3.0 U
					MH35L3	4.2	15 U
PB	Silver	0.5	0.0023	0.004	MH35H7	0.41	0.76 U
PB	Sodium	500	0.73	12.529	MH35H7	80.1	761 U
					MH35J6	77.4	604 U
					MH35J7	38.8	648 U
					MH35J8	43.9	775 U
					MH35J9	22.3	563 U
					MH35K0	59.0	551 U
					MH35K1	37.7	569 U
					MH35K2	105	552 U
					MH35K3	53.9	535 U
					MH35K4	64.3	541 U
					MH35K5	53.1	554 U
					MH35K6	70.9	547 U

Blank ID	Contaminant	CRQL (mg/Kg)	MDL (mg/Kg)	Concentration Found in Blank (mg/Kg)	Associated Samples	Concentration Found in Sample (mg/Kg)	Qualifier/ Adjustment
PB	Sodium	500	0.73	12.529	MH35K7	59.2	597 U
					MH35K8	22.1	664 U
					MH35K9	139	3380 U
					MH35L0	23.0	718 U
					MH35L1	44.3	855 U
					MH35L2	16.7	600 U
					MH35L3	48.1	2980 U

4. INDUCTIVELY COUPLED PLASMA - INTERFERENCE CHECK SAMPLE (ICP-ICS)

The ICP interference check sample (ICS) was run at the beginning and end of each sample analysis run and every 20 analytical samples, but not prior to the ICV.

Yes X No____

Comments: None.

Percent recovery of the analytes in the ICS solutions were within the range of 80-120% or the result was within ± the CRQL.

Yes X No____

Comments: None.

Sample results for aluminum, calcium, iron, and magnesium were less than the ICSA values or no interference was noted.

Yes X No___ NA___

Comments: None.

Sample results contain potential false positives and false negatives.

Yes X No____

Comments: The following table lists the elements with potential false positives or false negatives that resulted in sample qualification, affected samples, and data qualifiers:

ICP Interferences

Element	Concentration Found in ICSA Sample (ug/L)	Affected Samples	Concentration Found in Sample (mg/Kg)	Qualifier/ Adjustment
Beryllium	0.36	MH35K7 MH35K8 MH35L0 MH35L1 MH35L2	>MDL	J+
Potassium	494	MH35H7 MH35J6 MH35J9 MH35K0 MH35K1 MH35K2 MH35K3 MH35K4 MH35K5 MH35K6 MH35K7 MH35L1 MH35L2		
Thallium	-0.05	MH35J7 MH35J8 MH35K2 MH35K4 MH35K5 MH35K6 MH35K8	0.23 0.10 0.36 0.38 0.43 0.37 0.41	J-
		MH35K9 MH35L2 MH35L3	0.31 0.44 0.19	

5. LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No____

Comments: None.

All results were within control limits OF 70-130%.

Yes_X_ No____

Comments: None.

6. FORM 6 & 12 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The RPDs were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

For sample concentrations greater than five times the CRQL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes___ No_X_ NA___

Comments: The following table lists the duplicate results outside control limits, samples affected, and data qualifiers:

Element	RPD	QC Limit	Samples Affected	Qualifiers
Copper	43%	20%	All samples	J / UJ
Lead	71%			

For sample concentrations less than five times the CRQL, duplicate analysis results were within the control window of CRQL (absolute difference < CRQL for soils).

Yes_X_ No___ NA___

Comments: None.

7. SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The percent recoveries (%Rs) were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes_X_ No_X_

Comments: The following table lists the spike recoveries outside control limits, post digestion spike recoveries, samples affected, and data qualifiers:

Element	Matrix Spike %R	Post-Digestion %R	Samples Affected	Qualifiers
Antimony	17%	85%	All samples	J/UJ
Arsenic	130%	944%		J+
Barium	128%	NA		
Copper	134%	NA		
Silver	11%	88%		J/UJ

NA – No Post digest spike analyzed

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

Yes___ No_X_ NA___

Comments: For Arsenic and Copper the spike recoveries were outside of the Control Limits, but no Post-Digest Spike was performed.

8. ICP SERIAL DILUTION

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes_X_ No___

Comments: None.

The serial dilution was without interference problems as defined by the SOW.

Yes___ No_X__

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:

Element	% Difference	Samples Affected	Qualifiers
Arsenic	21%	All samples	J
Beryllium	19%		
Cadmium	22%		
Copper	14%		
Nickel	15%		
Sodium	53%		
Zinc	29%		

9. REGIONAL QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

Regional QA/QC was conducted as initiated by the EPA Region 8.

Yes___ No__ NA _X

Comments: The SDG shows no indication of EPA Region 8 initiating any additional QA / QC.

10. FORM 10 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes_X_ No____

Comments: None.

11. FORM 12 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form 12.

Yes_X_ No____

Comments: None.

12. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes X No____

Comments: None.

13. Additional Comments or Problems/Resolutions Not Addressed Above

Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

R	-	Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
J	-	The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.
J+	-	The associated numerical value is an estimated quantity but the result may be biased high.
J-	-	The associated numerical value is an estimated quantity but the result may be biased low.
U J	-	The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.
N J	-	Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
U	-	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRQL standard required for AA
CRQL	Contract Required Quantitation Limit
CRI	CRQL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma

ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MDL	Method Detection Limit
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

000261

EPA SAMPLE NO.
MH35H7

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770001
% Solids: 65.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5550			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1500			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	30000			P
7439-92-1	Lead				
7439-95-4	Magnesium	2560			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	934.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	80.1	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ JK
761 UJ JK
2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35H7

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770001

% Solids: 65.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.19	J	N	MS
7440-38-2	Arsenic	11.7		NE	MS
7440-39-3	Barium	190.		N	MS
7440-41-7	Beryllium	0.68	J	E	MS
7440-43-9	Cadmium	0.25	J	E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	4.8			MS
7440-48-4	Cobalt	4.3		*	MS
7440-50-8	Copper	34.5		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	72.5		*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	568.			MS
7439-97-6	Mercury				
7440-02-0	Nickel	3.9		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.1	J		MS
7440-22-4	Silver	0.41	J	N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.52	J		MS
7440-62-2	Vanadium	45.2			MS
7440-66-6	Zinc	99.0		*E	MS
57-12-5	Cyanide				

1.5U N
J+ N
J+ N
0.76UJ N
0.76UJ N
J+ N
J N
J N
3.8U N
0.76UJ N
J N
2/18/11

Color Before: ORANGE Clarity Before: Texture: MEDIUM

Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J6

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770004

% Solids: 82.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8780			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1780			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	102000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	5600			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	790.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	77.4	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ JK

604 UJ JK
2/18/11

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J6

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770004

% Solids: 82.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	1.8		N	MS
7440-38-2	Arsenic	9.1		NE	MS
7440-39-3	Barium	105.		N	MS
7440-41-7	Beryllium	0.19	J	E	MS
7440-43-9	Cadmium	0.63		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	4.9			MS
7440-48-4	Cobalt	1.3		*	MS
7440-50-8	Copper	195.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	6440		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	452.			MS
7439-97-6	Mercury				
7440-02-0	Nickel	2.3		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.7	J		MS
7440-22-4	Silver	103.		DN	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.50	J		MS
7440-62-2	Vanadium	26.0			MS
7440-66-6	Zinc	167.		*E	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J7

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770005

% Solids: 77.2 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1470			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	369.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	150000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	477.	J		P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	319.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	38.8	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

648 U KEA 2/18/11

648U JK

648U JK

648 UJ JK 2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J7

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770005

% Solids: 77.2 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	1.2	J	N	MS
7440-38-2	Arsenic	15.7		NE	MS
7440-39-3	Barium	18.7		N	MS
7440-41-7	Beryllium	0.22	J	E	MS
7440-43-9	Cadmium	0.58	J	E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	1.8			MS
7440-48-4	Cobalt	1.0		*	MS
7440-50-8	Copper	104.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	1850		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	630.			MS
7439-97-6	Mercury				
7440-02-0	Nickel	1.3		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.2	J		MS
7440-22-4	Silver	10.4		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.23	J		MS
7440-62-2	Vanadium	23.7			MS
7440-66-6	Zinc	265.		*E	MS
57-12-5	Cyanide				

1.3 U R
J+ R
J+ R
0.65 UJ R
0.65 UJ R
J R KJA 3/10/11
J+ R
J R
J R
3.2 U R
J R
0.5 J R
J R KJA 2/10/11
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J8

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770006

% Solids: 64.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2260			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	405.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	308000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	375.	J		P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	418.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	43.9	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

7750 J
7750 J
7750 J
7750 J
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J8

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770006
% Solids: 64.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	12.0		N	MS
7440-38-2	Arsenic	29.3		NE	MS
7440-39-3	Barium	68.3		N	MS
7440-41-7	Beryllium	0.16	J	E	MS
7440-43-9	Cadmium	35.4		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	2.2			MS
7440-48-4	Cobalt	0.41	J	*	MS
7440-50-8	Copper	286.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	5080		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	136.			MS
7439-97-6	Mercury				
7440-02-0	Nickel	0.36	J	E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.4	J		MS
7440-22-4	Silver	27.5		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.10	J		MS
7440-62-2	Vanadium	49.7			MS
7440-66-6	Zinc	11300		D*E	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: _____ Texture: COARSE
Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J9

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770007

% Solids: 88.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1130			P	
7440-36-0	Antimony					
7440-38-2	Arsenic					
7440-39-3	Barium					
7440-41-7	Beryllium					
7440-43-9	Cadmium					
7440-70-2	Calcium	57.7	J		P	563 U M
7440-47-3	Chromium					
7440-48-4	Cobalt					
7440-50-8	Copper					
7439-89-6	Iron	8170			P	
7439-92-1	Lead					
7439-95-4	Magnesium	45.9	J		P	563 U M
7439-96-5	Manganese					
7439-97-6	Mercury					
7440-02-0	Nickel					
7440-09-7	Potassium	714.			P	J+ N
7782-49-2	Selenium					
7440-22-4	Silver					
7440-23-5	Sodium	22.3	J	E	P	563 UJ M 2/18/11
7440-28-0	Thallium					
7440-62-2	Vanadium					
7440-66-6	Zinc					
57-12-5	Cyanide					

Color Before: YELLOW Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35J9

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770007

% Solids: 88.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	13.5		N	MS
7440-38-2	Arsenic	34.9		NE	MS
7440-39-3	Barium	83.8		N	MS
7440-41-7	Beryllium	0.21	J	E	MS
7440-43-9	Cadmium	5.0		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	1.3			MS
7440-48-4	Cobalt	0.19	J	*	MS
7440-50-8	Copper	211.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	3880		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	423.			MS
7439-97-6	Mercury				
7440-02-0	Nickel	0.19	J	E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.7	J		MS
7440-22-4	Silver	34.6		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.61			MS
7440-62-2	Vanadium	7.8			MS
7440-66-6	Zinc	1400		D*E	MS
57-12-5	Cyanide				

J M
J+ M
J+ M
0.56 UJ M
J M
0.56 U M
J+ M
J M
0.56 UJ M
2.8 U M
J M
~~J M~~ KJA 3/10/11
J M
2/18/11

Color Before: YELLOW Clarity Before: _____ Texture: MEDIUM

Color After: WHITE Clarity After: CLOUDY Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K0

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770008

% Solids: 90.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1450			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	259.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	16900			P
7439-92-1	Lead				
7439-95-4	Magnesium	72.4	J		P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1240			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	59.0	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

551 U JK

551 U JK

J+ JK

551 U JK
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K0

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770008

% Solids: 90.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	11.7		N	MS
7440-38-2	Arsenic	38.6		NE	MS
7440-39-3	Barium	97.2		N	MS
7440-41-7	Beryllium	0.32	J	E	MS
7440-43-9	Cadmium	7.6		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	0.97	J		MS
7440-48-4	Cobalt	0.23	J	*	MS
7440-50-8	Copper	471.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	4920		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	122.			MS
7439-97-6	Mercury				
7440-02-0	Nickel	0.17	J	E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.8	J		MS
7440-22-4	Silver	54.0		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.85			MS
7440-62-2	Vanadium	12.0			MS
7440-66-6	Zinc	2100		D*E	MS
57-12-5	Cyanide				

J m
J+ n
J+ n
0.55 UJ n
J n
1.1 U n
0.55 U n
J+ n
J n
0.55 UJ n
2.8 U n
J n
J n
J n
3/6/11
2/18/11

Color Before: YELLOW Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K1

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770009

% Solids: 87.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2020			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	807.			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	21500			P
7439-92-1	Lead				
7439-95-4	Magnesium	950.			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1460			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	37.7	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ M

569 UJ M
2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K1

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770009
% Solids: 87.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.26	J	N	MS
7440-38-2	Arsenic	90.2		NE	MS
7440-39-3	Barium	72.1		N	MS
7440-41-7	Beryllium	0.30	J	E	MS
7440-43-9	Cadmium	1.1		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	2.3			MS
7440-48-4	Cobalt	0.88		*	MS
7440-50-8	Copper	111.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	4510		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	843.		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	0.74		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.3	J		MS
7440-22-4	Silver	8.4		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	1.2		D	MS
7440-62-2	Vanadium	17.5			MS
7440-66-6	Zinc	319.		*E	MS
57-12-5	Cyanide				

1.1 U N
J+ N
J+ N
0.57 UJ N
J N
J KJA 3/10/11
J+ N
J N
J N
2.8 U N
J N
J KJA 3/10/11
J N
2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM
Color After: GREEN Clarity After: CLOUDY Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K2

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770010

% Solids: 90.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11200			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1360			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	36000			P
7439-92-1	Lead				
7439-95-4	Magnesium	11100			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	872.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	105.	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ TM

552 UJ TM
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K2

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770010

% Solids: 90.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.25	J	N	MS
7440-38-2	Arsenic	96.8		NE	MS
7440-39-3	Barium	34.9		N	MS
7440-41-7	Beryllium	0.20	J	E	MS
7440-43-9	Cadmium	0.55		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	11.9			MS
7440-48-4	Cobalt	5.5		*	MS
7440-50-8	Copper	47.1		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	1030		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	1620		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	5.3		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.60	J		MS
7440-22-4	Silver	5.7		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.36	J	D	MS
7440-62-2	Vanadium	62.1			MS
7440-66-6	Zinc	187.		*E	MS
57-12-5	Cyanide				

1.1 U N
J+ N
J+ N
0.55UJ N
0.55UJ N
J K3A 3/16/11
J+ N
J N
J N
2.8U N
J N
J - N
J K3A 3/16/11
J N
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: WHITE Clarity After: CLOUDY Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770011

% Solids: 93.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	665.			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	34.8	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	22200			P
7439-92-1	Lead				
7439-95-4	Magnesium	38.2	J		P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1200			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	53.9	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

535 U JK

535 U JK

J+ JK

535 U J JK
2/18/11

Color Before: YELLOW Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770011

% Solids: 93.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	12.2		N	MS
7440-38-2	Arsenic	55.2		NE	MS
7440-39-3	Barium	81.3		N	MS
7440-41-7	Beryllium	0.11	J	E	MS
7440-43-9	Cadmium	40.0		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	0.86	J		MS
7440-48-4	Cobalt	0.35	J	*	MS
7440-50-8	Copper	4600		D*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	15500		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	177.			MS
7439-97-6	Mercury				
7440-02-0	Nickel	0.27	J	E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	3.4			MS
7440-22-4	Silver	113.		DN	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.73			MS
7440-62-2	Vanadium	7.1			MS
7440-66-6	Zinc	10400		D*E	MS
57-12-5	Cyanide				

J N
J+ N
J+ N
0.54 U J N
J N
1.1 U N
0.54 U N
J+ N
J N
0.54 U J N
J KwA 2/16/11
J N KwA 2/16/11
J N
2/18/11

Color Before: GREEN Clarity Before: _____ Texture: MEDIUM

Color After: GRAY Clarity After: CLOUDY Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K4

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770012

% Solids: 92.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13000			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	2030			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	25200			P
7439-92-1	Lead				
7439-95-4	Magnesium	12700			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	671.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	64.3	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J + TH

541 UJ TH
2/18/11

Color Before: YELLOW Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K4

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770012

% Solids: 92.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.54	J	N	MS
7440-38-2	Arsenic	32.8		NE	MS
7440-39-3	Barium	46.1		N	MS
7440-41-7	Beryllium	0.35	J	E	MS
7440-43-9	Cadmium	0.70		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	10.0			MS
7440-48-4	Cobalt	4.6		*	MS
7440-50-8	Copper	33.1		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	2260		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	3280		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	5.3		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.83	J		MS
7440-22-4	Silver	4.6		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.38	J		MS
7440-62-2	Vanadium	60.8			MS
7440-66-6	Zinc	210.		*E	MS
57-12-5	Cyanide				

1.1 U
0.54 UJ
2.7 U
2/18/11

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K5

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770013
% Solids: 90.3 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	906.			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	48.6	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	7700			P
7439-92-1	Lead				
7439-95-4	Magnesium	118.	J		P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	961.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	53.1	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

554 U K

554 U K

J + K

554 UJ final
2/28/11

Color Before: GRAY Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K5

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770013
% Solids: 90.3 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					
7440-36-0	Antimony	0.99	J	N	MS	1.1 U
7440-38-2	Arsenic	13.6		NE	MS	J+
7440-39-3	Barium	37.1		N	MS	J+
7440-41-7	Beryllium	0.13	J	E	MS	0.55 UJ
7440-43-9	Cadmium	0.53		E	MS	0.55 UJ
7440-70-2	Calcium					
7440-47-3	Chromium	0.46	J		MS	1.1 U
7440-48-4	Cobalt	0.12	J	*	MS	0.55 U
7440-50-8	Copper	63.1		*NE	MS	J+
7439-89-6	Iron					
7439-92-1	Lead	1050		D*	MS	J
7439-95-4	Magnesium					
7439-96-5	Manganese	135.			MS	
7439-97-6	Mercury					
7440-02-0	Nickel	0.14	J	E	MS	0.55 UJ
7440-09-7	Potassium					
7782-49-2	Selenium	0.90	J		MS	2.8 U
7440-22-4	Silver	6.9		N	MS	J
7440-23-5	Sodium					
7440-28-0	Thallium	0.43	J		MS	J- VA 3/10/11
7440-62-2	Vanadium	4.9			MS	J
7440-66-6	Zinc	140.		*E	MS	
57-12-5	Cyanide					

2/18/11

Color Before: GREEN Clarity Before: _____ Texture: MEDIUM
Color After: GREEN Clarity After: CLOUDY Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K6

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770014
% Solids: 91.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3270			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	246.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	46300		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	1920			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	769.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	70.9	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

547 U m

J+ m

547 UJ m
2/18/11

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K6

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770014
% Solids: 91.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	3.6		N	MS
7440-38-2	Arsenic	37.7		NE	MS
7440-39-3	Barium	68.4		N	MS
7440-41-7	Beryllium	0.19	J	E	MS
7440-43-9	Cadmium	9.0		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	2.7			MS
7440-48-4	Cobalt	1.5		*	MS
7440-50-8	Copper	285.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	3170		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	433.			MS
7439-97-6	Mercury				
7440-02-0	Nickel	1.4		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.3	J		MS
7440-22-4	Silver	22.9		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.37	J		MS
7440-62-2	Vanadium	15.4			MS
7440-66-6	Zinc	2580		D*E	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K7

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770015

% Solids: 83.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19500			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1540			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	55900		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	9940			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1090			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	59.2	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ per
597 UJ per 2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

000286

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K7

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770015

% Solids: 83.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.41	J	N	MS
7440-38-2	Arsenic	31.9		NE	MS
7440-39-3	Barium	154.		N	MS
7440-41-7	Beryllium	0.79		E	MS
7440-43-9	Cadmium	3.7		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	9.9			MS
7440-48-4	Cobalt	21.4		*	MS
7440-50-8	Copper	162.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	1070		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	5570		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	9.5		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.52	J		MS
7440-22-4	Silver	2.7		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.56	J		MS
7440-62-2	Vanadium	47.5			MS
7440-66-6	Zinc	498.		*E	MS
57-12-5	Cyanide				

1.2 U N
J+ N
J+ N
J+ N
J N
J N
J+ N
J N
3.0 U N
J N
J N
J N
2/18/14

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K8

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770016

% Solids: 75.3 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13600			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1310			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	37200			P
7439-92-1	Lead				
7439-95-4	Magnesium	7200			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	645.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	22.1	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

664 U K

664 UJ K
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K8

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770016

% Solids: 75.3 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.59	J	N	MS
7440-38-2	Arsenic	25.8		NE	MS
7440-39-3	Barium	74.3		N	MS
7440-41-7	Beryllium	1.3		E	MS
7440-43-9	Cadmium	6.0		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	7.1			MS
7440-48-4	Cobalt	12.3		*	MS
7440-50-8	Copper	516.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	481.		*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	4710		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	10.3		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.35	J		MS
7440-22-4	Silver	2.0		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.41	J		MS
7440-62-2	Vanadium	32.5			MS
7440-66-6	Zinc	651.		D*E	MS
57-12-5	Cyanide				

1,3 U N
J+ N
J+ N
J+ N
J N
N N/A 3/10/11
J+ N
J N
J N
3.3 U N
J N
J N
J- N
J N
N N/A 3/10/11
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: TAN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K9

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770017

% Solids: 14.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6720			P	
7440-36-0	Antimony					
7440-38-2	Arsenic					
7440-39-3	Barium					
7440-41-7	Beryllium					
7440-43-9	Cadmium					
7440-70-2	Calcium	2040	J		P	3380 U PK
7440-47-3	Chromium					
7440-48-4	Cobalt					
7440-50-8	Copper					
7439-89-6	Iron	141000			P	
7439-92-1	Lead					
7439-95-4	Magnesium	2120	J		P	3380 U PK
7439-96-5	Manganese					
7439-97-6	Mercury					
7440-02-0	Nickel					
7440-09-7	Potassium	1130	J		P	3380 U PK
7782-49-2	Selenium					
7440-22-4	Silver					
7440-23-5	Sodium	139.	J	E	P	3380 UJ PK 2/18/11
7440-28-0	Thallium					
7440-62-2	Vanadium					
7440-66-6	Zinc					
57-12-5	Cyanide					

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35K9

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770017
% Solids: 14.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	5.2	J	N	MS
7440-38-2	Arsenic	42.6		NE	MS
7440-39-3	Barium	119.		N	MS
7440-41-7	Beryllium	0.84	J	E	MS
7440-43-9	Cadmium	1.7	J	E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	19.7			MS
7440-48-4	Cobalt	4.8		*	MS
7440-50-8	Copper	303.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	668.		*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	1180			MS
7439-97-6	Mercury				
7440-02-0	Nickel	5.9		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.0	J		MS
7440-22-4	Silver	27.1		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.31	J		MS
7440-62-2	Vanadium	20.8			MS
7440-66-6	Zinc	350.		*E	MS
57-12-5	Cyanide				

6.8 U N
J+ N
J+ N
3.4 UJ N
3.4 UJ N
J ~~N~~ KJA 3/10/11
J+ N
J N
J N
17 U N
J N
J- N
J ~~N~~ KJA 3/10/11
J N
9/18/11

Color Before: BROWN Clarity Before: Texture: FINE
Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35L0

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770018

% Solids: 69.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3020			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	223.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	5150			P
7439-92-1	Lead				
7439-95-4	Magnesium	1090			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	307.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	23.0	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

718 U JL

718 U JL

718 UJ JL
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35L0

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770018

% Solids: 69.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	1.7		N	MS
7440-38-2	Arsenic	45.6		NE	MS
7440-39-3	Barium	264.		N	MS
7440-41-7	Beryllium	1.3		E	MS
7440-43-9	Cadmium	6.0		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	6.2			MS
7440-48-4	Cobalt	15.3		*	MS
7440-50-8	Copper	424.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	2030		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	7960		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	7.7		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.66	J		MS
7440-22-4	Silver	11.8		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.77			MS
7440-62-2	Vanadium	27.8			MS
7440-66-6	Zinc	614.		*E	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: TAN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35L1

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770019

% Solids: 58.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11500			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1280			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	27100			P
7439-92-1	Lead				
7439-95-4	Magnesium	5670			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1210			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	44.3	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ 12

~~88~~ 855 UJ 12
2/18/11

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35L1

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770019

% Solids: 58.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.71	J	N	MS
7440-38-2	Arsenic	49.4		NE	MS
7440-39-3	Barium	205.		N	MS
7440-41-7	Beryllium	1.3		E	MS
7440-43-9	Cadmium	7.0		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	8.2			MS
7440-48-4	Cobalt	15.8		*	MS
7440-50-8	Copper	294.		*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	754.		*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	11500		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	7.8		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.59	J		MS
7440-22-4	Silver	4.0		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.88			MS
7440-62-2	Vanadium	38.0			MS
7440-66-6	Zinc	899.		D*E	MS
57-12-5	Cyanide				

1.7U JK
J+ JK
J+ JK
J JK
J JK 2/18/11
J+ JK
J JK
J JK
4.3U JK
J JK
J JK 2/18/11
J JK
2/18/11

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: TAN Clarity After: CLOUDY Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

000295

EPA SAMPLE NO.
MH35L2

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770020
% Solids: 83.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15700			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1990			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	71200		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	11500			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	642.			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	16.7	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ M

600 UJ M
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35L2

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7
Matrix: Soil Lab Sample ID: 1030770020
% Solids: 83.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.34	J	N	MS
7440-38-2	Arsenic	31.5		NE	MS
7440-39-3	Barium	94.2		N	MS
7440-41-7	Beryllium	1.4		E	MS
7440-43-9	Cadmium	10.4		E	MS
7440-70-2	Calcium				
7440-47-3	Chromium	8.0			MS
7440-48-4	Cobalt	20.5		*	MS
7440-50-8	Copper	1240		D*NE	MS
7439-89-6	Iron				
7439-92-1	Lead	1480		D*	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	6600		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	11.7		E	MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.59	J		MS
7440-22-4	Silver	1.2		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.44	J		MS
7440-62-2	Vanadium	40.9			MS
7440-66-6	Zinc	1500		D*E	MS
57-12-5	Cyanide				

1.2 U NE
J+ NE
J+ NE
J+ NE
J NE
J NE KA 3/10/11
J+ NE
J NE
J NE
3.0 U NE
J NE
J- NE KA 3/10/11
J NE
J NE
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: COARSE
Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35L3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770021

% Solids: 16.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	986.			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	279.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	273000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	486.	J		P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	773.	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	48.1	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

2980 U K

2980 U K

2980 U K

2980 UJ K
2/18/11

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35L3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH35H7

Matrix: Soil Lab Sample ID: 1030770021

% Solids: 16.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum					J R
7440-36-0	Antimony	23.3		N	MS	J+ R
7440-38-2	Arsenic	969.		NE	MS	J+ R
7440-39-3	Barium	37.1		N	MS	3.0 UJ R
7440-41-7	Beryllium	0.11	J	E	MS	3.0 UJ R
7440-43-9	Cadmium	2.8	J	E	MS	
7440-70-2	Calcium					
7440-47-3	Chromium	11.3			MS	
7440-48-4	Cobalt	1.4	J	*	MS	3.0 U R
7440-50-8	Copper	235.		*NE	MS	J+ R
7439-89-6	Iron					
7439-92-1	Lead	1100		*	MS	J R
7439-95-4	Magnesium					
7439-96-5	Manganese	304.			MS	
7439-97-6	Mercury					
7440-02-0	Nickel	1.6	J	E	MS	3.0 UJ R
7440-09-7	Potassium					
7782-49-2	Selenium	4.2	J		MS	15 U R
7440-22-4	Silver	13.2		N	MS	J R
7440-23-5	Sodium					
7440-28-0	Thallium	0.19	J		MS	J- R
7440-62-2	Vanadium	57.1			MS	J R KSA 3/10/11
7440-66-6	Zinc	524.		*E	MS	J R
57-12-5	Cyanide					2/18/11

Color Before: RED Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

REGION VIII
DATA VALIDATION REPORT
INORGANIC

Case/TDD No.	Site Name		Operable Unit
40755 / 1008-16	Upper Animas Mining District		
RPM/OSC Name			
Sabrina Forrest			
Contractor Laboratory	**Contract No.**	**SDG No.**	**Laboratory DPO/Region**
ALS Laboratory Group	EPW05026	MH36L0	

Review Assigned Date: December 15, 2010 Data Validator: Fred Luck
Review Completion Date: February 18, 2011 Report Reviewer: Lesley Boyd

Sample ID	Matrix	Analysis
MH36L0	Sediment	CLP –Metals
MH36L1		
MH36L2		
MH36L3		
MH36L4		
MH36L5	Mine Sediment	
MH36L6	Sediment	
MH36L7		
MH36L8		
MH36L9		

DATA QUALITY STATEMENT

( ) Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
( ) Data are UNACCEPTABLE according to EPA Functional Guidelines.
(X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No ___X___

CLP Project Officer Attention Required? Yes _____ No ___X___ If yes, list the items that require attention:

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review," January 2010.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 40755, SDG No. MH36L0, consisted of ten sediment / mine sediment samples for metals by ICP-AES and ICP-MS (ISM01.2). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH36L0, MH36L1, MH36L2, MH36L3, MH36L4, MH36L5, MH36L7, MH36L8, MH36L9	Antimony	U	Blank Contamination	3
MH36L9	Barium			
MH36L0, MH36L2, MH36L4, MH36L5, MH36L6, MH36L7, MH36L8, MH36L9	Beryllium			
MH36L0, MH36L5, MH36L8, MH36L9	Cadmium			
MH36L2, MH36L4, MH36L5, MH36L9	Calcium			
MH36L5, MH36L9	Chromium			
MH36L5, MH36L9	Cobalt			
MH36L5	Nickel			
MH36L0, MH36L1, MH36L2, MH36L3, MH36L4, MH36L5, MH36L6, MH36L7, MH36L8, MH36L9	Selenium			
MH36L5, MH36L9	Silver			
MH36L1, MH36L3	Beryllium	J+	Potentially false positive detection in ICS check sample	4
All Samples	Potassium			
MH36L0, MH36L1, MH36L2, MH36L3, MH36L4, MH36L6, MH36L7, MH36L8	Silver			
All Samples	Sodium			
	Thallium			

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
All Samples	Selenium, Thallium	J- /UJ	MS 30 - 74%R, Post Digestion Spike %R < 75%	7
	Antimony, Silver	J/UJ	MS <30%R, Post Digestion Spike %R ≥ 75%	
	Arsenic, Lead, Potassium, Sodium, Zinc	J	Serial Dilution %D > 10%	8

1. PRESERVATION AND HOLDING TIMES

All technical holding times and preservation criteria were met.

Yes___ No_X_

Comments: The samples were analyzed within 180 days for the ICP metals. According to the Sample Log-In Sheet and case narrative, the two sample coolers were each received at a temperature of 7°C, which is outside the recommended temperature range of 4 ± 2°C. The Sample Log-In Sheet further indicates that neither cooler contained a Cooler Temperature Indicator Bottle, as indicated on the form to be required. There is also no indication that SMO was contacted regarding this issue, neither is any documentation of the resolution or indication of how the cooler temperature was derived provided. The TR/COC also did not designate a sample for laboratory QC, but the documentation of the resolution of this issue is provided in the SDG.

When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters.

The field sampler had used CLP IDs in the incorrect format using the letter 'I' in accordance with the reported previous directions from Region 8, the SMO coordinator assigned new sample IDs to the affected samples and the laboratory was to note this issue in the SDG narrative, which is did. There is no apparent indication that the laboratory had any error involving sample confusion.

No other shipping or receiving problems were noted. Chain-of-custody, summary forms, and raw data were evaluated.

2. INSTRUMENT CALIBRATIONS: INITIAL AND CONTINUING CALIBRATION VERIFICATION (ICV AND CCV)

The initial and continuing calibration verification standards (ICV and CCV, respectively) met SOW requirements.

Yes_X_ No___

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 85-115% for cyanide, and 80-120% for mercury.

Yes_X_ No___

Comments: None.

The continuing calibration standards were run at 10% frequency or every two hours.

Yes X No____

Comments: None.

3. **BLANKS**

The initial and continuing calibration blanks (ICB and CCB, respectively) met SOW requirements.

Yes X No____

Comments: For the ICP-AES analyses, the ICB was rerun.

The continuing calibration blanks were run at 10% frequency.

Yes X No____

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes X No____

Comments: None.

All analyzed blanks were free of contamination.

Yes____ No X

Comments: The following table lists the blanks with contamination that resulted in sample qualification, elements present, affected samples, and data qualifiers:

Blank Contaminants

Blank ID	Contaminant	CRQL	MDL (mg/Kg)	Concentration Found in Blank (mg/Kg)	Associated Samples	Concentration Found in Sample (mg/Kg)	Qualifier/ Adjustment
PB	Antimony	1	0.0097	0.030	MH36L0	0.53	1.3 U
					MH36L1	0.45	1.3 U
					MH36L2	0.86	1.6 U
					MH36L3	0.45	1.4 U
					MH36L4	1.7	2.0 U
					MH36L5	0.31	3.2 U
					MH36L7	0.45	1.3 U
					MH36L8	0.19	1.3 U
					MH36L9	0.44	5.0 U
PB	Barium	5	0.044	5.0	MH36L9	21.4	24.9 U
PB	Beryllium	0.5	0.0032	0.011	MH36L0	0.38	0.63 U
					MH36L2	0.30	0.80 U
					MH36L4	0.34	1.0 U
					MH36L5	0.79	1.6 U
					MH36L6	0.46	0.95 U
					MH36L7	0.45	0.65 U
					MH36L8	0.53	0.63 U
					MH36L9	1.4	2.5 U
PB	Cadmium	0.5	0.0027	0.50	MH36L0	0.73	0.63 U
					MH36L5	0.11	1.6 U
					MH36L8	0.42	0.63 U
					MH36L9	1.2	2.5 U
PB	Calcium	500	1.7	2.587	MH36L2	592	804 U
					MH36L4	851	1030 U
					MH36L5	1540	1580 U
					MH36L9	2310	2490 U
PB	Chromium	1	0.026	1.00	MH36L5	2.6	3.2 U
					MH36L9	2.8	5.0 U
PB	Cobalt	1	0.0053	0.024	MH36L5	1.5	1.6 U
					MH36L9	1.5	2.5 U
PB	Nickel	0.5	0.013	0.500	MH36L5	1.2	1.6 U
PB	Selenium	2.5	0.036	2.500	MH36L0	0.55	3.1 U
					MH36L1	0.32	3.3 U
					MH36L2	0.86	4.0 U
					MH36L3	0.70	3.5 U
					MH36L4	1.2	5.1 U
					MH36L5	0.16	7.9 U
					MH36L6	1.4	4.8 U
					MH36L7	1.2	3.3 U
					MH36L8	0.61	3.1 U
					MH36L9	12.4	12.4 U
PB	Silver	0.5	0.0023	0.006	MH36L5	0.31	1.6 U
					MH36L9	0.71	2.5 U

4. **INDUCTIVELY COUPLED PLASMA - INTERFERENCE CHECK SAMPLE (ICP-ICS)**

The ICP interference check sample (ICS) was run at the beginning and end of each sample analysis run and every 20 analytical samples, but not prior to the ICV.

Yes X No____

Comments: None.

Percent recovery of the analytes in the ICS solutions were within the range of 80-120% or the result was within ± the CRQL.

Yes___ No X

Comments: For Potassium and Sodium, the ICP-AES Interference Check Sample Results exceeded the True Values by approximately 1.8 to 2.0 times the CRQL, this analysis was repeated with similar results. Results for these analytes that are ≥ MDL have been qualified as estimated high (J+).

Sample results for aluminum, calcium, iron, and magnesium were less than the ICSA values or no interference was noted.

Yes X No___ NA___

Comments: None.

Sample results contain potential false positives and false negatives.

Yes X No____

Comments: The following table lists the elements with potential false positives or false negatives that resulted in sample qualification, affected samples, and data qualifiers:

ICP Interferences

Element	Concentration Found in ICSA Sample (ug/L)	Affected Samples	Concentration Found in Sample (mg/Kg)	Qualifier/ Adjustment
Beryllium	0.39	MH36L1 MH36L3	>MDL	J+
Potassium	1020	All samples		
Silver	0.027	MH36L0 MH36L1 MH36L2 MH36L3 MH36L4 MH36L6 MH36L7 MH36L8		
Sodium	975	All samples		
Thallium	0.049	All samples		

5. LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No____

Comments: None.

All results were within control limits OF 70-130%.

Yes_X_ No____

Comments: None.

6. FORM 6 & 12 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA____

Comments: None.

The RPDs were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

For sample concentrations greater than five times the CRQL, RPDs were within 20% (limits of 35% apply for soil/sediments/tailings samples).

Yes_X_ No___ NA___

Comments: None.

For sample concentrations less than five times the CRQL, duplicate analysis results were within the control window of CRQL (absolute difference < CRQL for soils).

Yes_X_ No___ NA___

Comments: None.

7. SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The percent recoveries (%Rs) were calculated correctly.

Yes_X_ No___ NA___

Comments: None
Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes___ No_X_

Comments: The following table lists the spike recoveries outside control limits, post digestion spike recoveries, samples affected, and data qualifiers:

Element	Matrix Spike %R	Post-Digestion %R	Samples Affected	Qualifiers
Antimony	20%	85%	All samples	J/UJ
Selenium	55%	67%		J-/UJ
Silver	-11%	86%		J/UJ
Thallium	74%	69%		J-/UJ

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

Yes_X_ No__ NA___

Comments: None.

8. ICP SERIAL DILUTION

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes_X_ No___

Comments: None.

The serial dilution was without interference problems as defined by the SOW.

Yes___ No_X_

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:

Element	% Difference	Samples Affected	Qualifiers
Arsenic	18%	All samples	J
Lead	34%		
Potassium	19%		
Sodium	27%		
Zinc	24%		

9. REGIONAL QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

Regional QA/QC was conducted as initiated by the EPA Region 8.

Yes__ No__ NA _X_

Comments: The SDG shows no indication of EPA Region 8 initiating any additional QA / QC.

10. FORM 10 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes_X_ No____

Comments: None.

11. FORM 12 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form 12.

Yes_X_ No____

Comments: None.

12. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes_X_ No____

Comments: None.

13. Additional Comments or Problems/Resolutions Not Addressed Above

Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

R	-	Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
J	-	The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.
J+	-	The associated numerical value is an estimated quantity but the result may be biased high.
J-	-	The associated numerical value is an estimated quantity but the result may be biased low.
U J	-	The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.
N J	-	Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
U	-	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRQL standard required for AA
CRQL	Contract Required Quantitation Limit
CRI	CRQL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MDL	Method Detection Limit
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L0

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771001

% Solids: 79.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8100			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1740			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	38100			P
7439-92-1	Lead				
7439-95-4	Magnesium	5830			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	440.	J	E	P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	30.8	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ TM

J+ TM
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L0

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771001

% Solids: 79.4 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.53	J	N	MS
7440-38-2	Arsenic	17.7		E	MS
7440-39-3	Barium	121.		*	MS
7440-41-7	Beryllium	0.38	J	E	MS
7440-43-9	Cadmium	0.48	J		MS
7440-70-2	Calcium				
7440-47-3	Chromium	6.9			MS
7440-48-4	Cobalt	13.2		*	MS
7440-50-8	Copper	63.6			MS
7439-89-6	Iron				
7439-92-1	Lead	379.		E	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	1420		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	6.3			MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.55	J	N	MS
7440-22-4	Silver	1.3		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.30	J	N	MS
7440-62-2	Vanadium	46.3			MS
7440-66-6	Zinc	184.		E	MS
57-12-5	Cyanide				

1.30 J N
J N KA 3/10/11
0.63 U N
0.63 U N
J N LeA 3/10/11
J N
3.1 UJ N
J+ N
J+ N
J N
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L1

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771002

% Solids: 74.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13100			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	2020			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	35000			P
7439-92-1	Lead				
7439-95-4	Magnesium	8970			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	501.	J	E	P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	21.9	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ M

J+ M
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L1

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771002

% Solids: 74.7 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.45	J	N	MS
7440-38-2	Arsenic	28.1		E	MS
7440-39-3	Barium	90.8		*	MS
7440-41-7	Beryllium	0.73		E	MS
7440-43-9	Cadmium	2.0			MS
7440-70-2	Calcium				
7440-47-3	Chromium	9.0			MS
7440-48-4	Cobalt	11.2		*	MS
7440-50-8	Copper	193.			MS
7439-89-6	Iron				
7439-92-1	Lead	543.		E	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	3650		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	5.2			MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.32	J	N	MS
7440-22-4	Silver	1.7		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.40	J	N	MS
7440-62-2	Vanadium	32.2			MS
7440-66-6	Zinc	332.		E	MS
57-12-5	Cyanide				

1.3 UJ N
J N KA 3/10/11
J+ N
J KA 3/10/11 N
J N
3.3 UJ N
J+ N
J+ N
J N
2/28/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L2

Lab Name: ALS Laboratory Group Contract: EPW09036
Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0
Matrix: Soil Lab Sample ID: 1030771003
% Solids: 62.2 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5960			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	592.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	116000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	3260			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	842.		E	P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	65.3	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

804 U M

J+ M

J+ M
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L2

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771003

% Solids: 62.2 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.86	J	N	MS
7440-38-2	Arsenic	62.5		E	MS
7440-39-3	Barium	121.		*	MS
7440-41-7	Beryllium	0.30	J	E	MS
7440-43-9	Cadmium	1.4			MS
7440-70-2	Calcium				
7440-47-3	Chromium	8.5			MS
7440-48-4	Cobalt	5.4		*	MS
7440-50-8	Copper	177.			MS
7439-89-6	Iron				
7439-92-1	Lead	546.		E	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	1130		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	4.5			MS
~~7440-09-7~~	~~Potassium~~				
7782-49-2	Selenium	0.86	J	N	MS
7440-22-4	Silver	5.1		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.30	J	N	MS
7440-62-2	Vanadium	42.6			MS
7440-66-6	Zinc	444.		E	MS
57-12-5	Cyanide				

1.6 UJ M
J M
~~J M~~ KJA 3/10/11
0.8 U M
~~J M~~ KJA 3/10/11
J M
4.0 UJ M
J+ M
J+ M
J M
8/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771004

% Solids: 70.9 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12200			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1110			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	31900			P
7439-92-1	Lead				
7439-95-4	Magnesium	5340			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
~~7440-09-7~~	~~Potassium~~	~~648.~~		~~E~~	~~P~~
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	29.5	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ M

J+ M 2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L3

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771004

% Solids: 70.9 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.45	J	N	MS
7440-38-2	Arsenic	36.8		E	MS
7440-39-3	Barium	147.		*	MS
7440-41-7	Beryllium	1.4		E	MS
7440-43-9	Cadmium	7.4			MS
7440-70-2	Calcium				
7440-47-3	Chromium	9.6			MS
7440-48-4	Cobalt	12.9		*	MS
7440-50-8	Copper	546.			MS
7439-89-6	Iron				
7439-92-1	Lead	779.		DE	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	5130		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	6.9			MS
~~7440-09-7~~	~~Potassium~~				
7782-49-2	Selenium	0.70	J	N	MS
7440-22-4	Silver	2.8		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.40	J	N	MS
7440-62-2	Vanadium	33.2			MS
7440-66-6	Zinc	1990		DE	MS
57-12-5	Cyanide				

1.4 UJ
KA 3/10/14
3.5 UJ
7/18/14

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L4

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771005

% Solids: 48.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8140			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	851.	J		P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	154000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	4670			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1120		E	P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	98.1	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

1030 U K

J+ K

J+ K
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L4

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771005

% Solids: 48.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	1.7	J	N	MS
7440-38-2	Arsenic	86.3		E	MS
7440-39-3	Barium	168.		*	MS
7440-41-7	Beryllium	0.34	J	E	MS
7440-43-9	Cadmium	1.2			MS
7440-70-2	Calcium				
7440-47-3	Chromium	9.8			MS
7440-48-4	Cobalt	6.1		*	MS
7440-50-8	Copper	251.			MS
7439-89-6	Iron				
7439-92-1	Lead	656.		E	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	1400		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	4.8			MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.2	J	N	MS
7440-22-4	Silver	7.5		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.31	J	N	MS
7440-62-2	Vanadium	44.3			MS
7440-66-6	Zinc	464.		E	MS
57-12-5	Cyanide				

2.0 UJ M
J M HA 3/10/11
1.0 U M
J M HA 3/10/11
J M
5.1 UJ M
J+ M
J+ M
J M
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L5

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771008

% Solids: 31.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5480			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1540			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	359000		D	P
7439-92-1	Lead				
7439-95-4	Magnesium	644.	J		P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	146.	J	E	P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	31.2	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

1580 U TH

J+ TH

J+ TH 2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L5

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771008

% Solids: 31.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.31	J	N	MS
7440-38-2	Arsenic	19.1		E	MS
7440-39-3	Barium	17.4		*	MS
7440-41-7	Beryllium	0.79	J	E	MS
7440-43-9	Cadmium	0.23	J		MS
7440-70-2	Calcium				
7440-47-3	Chromium	2.6	J		MS
7440-48-4	Cobalt	1.5	J	*	MS
7440-50-8	Copper	20.2			MS
7439-89-6	Iron				
7439-92-1	Lead	115.		E	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	280.			MS
7439-97-6	Mercury				
7440-02-0	Nickel	1.2	J		MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.16	J	N	MS
7440-22-4	Silver	0.31	J	N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	1.6	U	N	MS
7440-62-2	Vanadium	45.9			MS
7440-66-6	Zinc	282.		E	MS
57-12-5	Cyanide				

3.2 U J
J
J
1.6 U
1.6 U
3.2 U
1.6 U J
J
1.6 U
7.9 U J
1.6 U J
J +
J
2/18/11

Color Before: ORANGE Clarity Before: Texture: FINE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L6

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771009

% Solids: 52.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	7030			P	
7440-36-0	Antimony					
7440-38-2	Arsenic					
7440-39-3	Barium					
7440-41-7	Beryllium					
7440-43-9	Cadmium					
7440-70-2	Calcium	1420			P	
7440-47-3	Chromium					
7440-48-4	Cobalt					
7440-50-8	Copper					
7439-89-6	Iron	114000		D	P	
7439-92-1	Lead					
7439-95-4	Magnesium	3810			P	
7439-96-5	Manganese					
7439-97-6	Mercury					
7440-02-0	Nickel					
7440-09-7	Potassium	1560		E	P	J+ K
7782-49-2	Selenium					
7440-22-4	Silver					
7440-23-5	Sodium	118.	J	E	P	J+ K 2/18/11
7440-28-0	Thallium					
7440-62-2	Vanadium					
7440-66-6	Zinc					
57-12-5	Cyanide					

Color Before: ORANGE Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L6

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771009

% Solids: 52.6 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	2.8		N	MS
7440-38-2	Arsenic	50.2		E	MS
7440-39-3	Barium	146.		*	MS
7440-41-7	Beryllium	0.46	J	E	MS
7440-43-9	Cadmium	2.9			MS
7440-70-2	Calcium				
7440-47-3	Chromium	8.4			MS
7440-48-4	Cobalt	3.9		*	MS
7440-50-8	Copper	279.			MS
7439-89-6	Iron				
7439-92-1	Lead	5720		DE	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	1340		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	3.8			MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.4	J	N	MS
7440-22-4	Silver	12.1		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.60	J	N	MS
7440-62-2	Vanadium	47.7			MS
7440-66-6	Zinc	815.		E	MS
57-12-5	Cyanide				

Color Before: ORANGE Clarity Before: _____ Texture: FINE

Color After: WHITE Clarity After: CLOUDY Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L7

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771010

% Solids: 76.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9570			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1530			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	57600			P
7439-92-1	Lead				
7439-95-4	Magnesium	6070			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	751.		E	P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	62.3	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ TK

J+ TK 2/18/11

Color Before: ORANGE Clarity Before: _____ Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L7

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771010

% Solids: 76.8 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.45	J	N	MS
7440-38-2	Arsenic	20.3		E	MS
7440-39-3	Barium	97.3		*	MS
7440-41-7	Beryllium	0.45	J	E	MS
7440-43-9	Cadmium	0.90			MS
7440-70-2	Calcium				
7440-47-3	Chromium	7.0			MS
7440-48-4	Cobalt	11.8		*	MS
7440-50-8	Copper	86.5			MS
7439-89-6	Iron				
7439-92-1	Lead	726.		DE	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	1530		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	4.4			MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.2	J	N	MS
7440-22-4	Silver	1.7		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.39	J	N	MS
7440-62-2	Vanadium	47.3			MS
7440-66-6	Zinc	261.		E	MS
57-12-5	Cyanide				

1.3 U J JK
J JK KA 3/16/11
0.65 U JK
J KA 3/16/11
J JK
3.3 UJ JK
J+ JK
J+ KA 3/16/11
J JK 2/18/11

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts: _____

Comments:
E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L8

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771011

% Solids: 79.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10900			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1890			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	37100			P
7439-92-1	Lead				
7439-95-4	Magnesium	5380			P
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	1000		E	P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	99.3	J	E	P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

J+ TK

J+ TK 2/18/11

Color Before: ORANGE Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

E: The reported value is estimated due to the presence of interference.

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH36L8

Lab Name: ALS Laboratory Group Contract: EPW09036

Lab Code: DATAC Case No.: 40755 Mod. Ref. No.: _____ SDG No.: MH36L0

Matrix: Soil Lab Sample ID: 1030771011

% Solids: 79.5 Date Received: 11/03/2010

Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.19	J	N	MS
7440-38-2	Arsenic	17.3		E	MS
7440-39-3	Barium	102.		*	MS
7440-41-7	Beryllium	0.53	J	E	MS
7440-43-9	Cadmium	0.12	J		MS
7440-70-2	Calcium				
7440-47-3	Chromium	8.0			MS
7440-48-4	Cobalt	10.4		*	MS
7440-50-8	Copper	73.1			MS
7439-89-6	Iron				
7439-92-1	Lead	532.		E	MS
7439-95-4	Magnesium				
7439-96-5	Manganese	675.		D	MS
7439-97-6	Mercury				
7440-02-0	Nickel	7.1			MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.61	J	N	MS
7440-22-4	Silver	1.3		N	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.35	J	N	MS
7440-62-2	Vanadium	49.0			MS
7440-66-6	Zinc	73.8		E	MS
57-12-5	Cyanide				

1.3 U J M
J M KSA 3/10/11
J M
0.63 U M
0.63 U M
J M KSA 3/10/11
J M
3.1 UJ M
J+ M
J+ M
J M
2/18/11

Color Before: BROWN Clarity Before: _____ Texture: COARSE

Color After: GRAY Clarity After: CLEAR Artifacts: _____

Comments:

E: The reported value is estimated due to the presence of interference.